

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Stuart Ecton, B.S. Chemical Engineering

GENERAL INFORMATION:

Name:	Marathon Ashland Petroleum (Catlettsburg
Refining	LLC Marine Repair Terminal
Address:	U.S. 23 and 13th Street, Catlettsburg, Kentucky
Date application received:	July 19, 1999
SIC/Source description:	4491/Marine Cargo Handling
AFS(10-digit) Plant ID:	21-019-00016
EIS #:	103-0340-0016
Application log number:	F950
Permit number:	V-99-028

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included ?
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS,MACT	<input type="checkbox"/> Other

MISCELLANEOUS:

☐ Acid rain source

☐ Source subject to 112(r)

☐ Source applied for federally enforceable emissions cap

☐ Source provided terms for alternative operating scenarios

☒ Source subject to a MACT standard

☐ Source requested case-by-case 112(g) or (j) determination

☐ Application proposes new control technology

☒ Certified by responsible official

☒ Diagrams or drawings included

☐ Confidential business information (CBI) submitted in application

☐ Pollution Prevention Measures

☒ [*] Area is non-attainment (list pollutants): Boyd County was recently redesignated attainment for ozone

EMISSIONS SUMMARY

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	3.90	15.30
SO ₂	32.80	197.80
NO _x	26.82	49.50
CO	2.44	4.50
VOC	225.70 (11.25 @95% control)	1,472.00 (73.60@95% control)
LEAD		
<i>TOTAL HAPS</i>	8.33	57.90
<i>n-hexane</i>	<i>2.61</i>	<i>18.37</i>
<i>Xylene</i>	<i>2.35</i>	<i>16.51</i>
<i>Benzene</i>	<i>2.13</i>	<i>14.98</i>

This table indicates emissions for uncontrolled barge cleaning.

SOURCE PROCESS DESCRIPTION:

The Marathon Ashland Petroleum Marine Repair Terminal is comprised of:

- a) Truck Unloading Station (Lube Oil)
- b) Truck Loading Station (Heavy Oil, Light Oil and Styrene)*
- c) Seven Black Fixed Roof Storage Tanks
- d) One Internal Floating Roof Storage Tank
- e) Barge Painting
- f) Hot Water Barge Cargo Area Cleaning
- g) Three Boilers: Two 10.2mmBTU/hr and one 12.5mmBTU/hr
- h) Various Pipeline Equipment: Pumps, Valves and Flanges
- i) Barge Loading of Light Rerun and Heavy Rerun

*-Not in operation as of the date of the last inspection.

The three boilers provide hot water for cleaning empty barges. These boilers are fired with either material recovered from the heavy oil barges or # 2 fuel oil. No surfactants or additives are used in the cleaning process. The tanker shell clingage is vented directly to the atmosphere and is by far the largest emitter of VOC. The contents of the barge after water washing are pumped into the various storage tanks/oil-water separators or to the truck unloading rack. The truck loading rack has not operated for several years and may be removed from the plant.

There are also two Dissolved Air Flootation units for treatment of water before it is piped to the city sewer system.

Types of control:

None other than tank seals as of this date. However, the draft permit does require that the barge cleaning operation be retrofitted with a control system which is at least 95% efficient.

EMISSION AND OPERATING CAPS DESCRIPTION:

Regulation 40 CFR 63 Subpart II, National emission standards for shipbuilding and ship repair (surface coating), applies to the source's barge painting operation. Pursuant to the MACT, the painting operation will be limited to coatings to which thinning solvents will not be added (40 CFR 63.785(c)(1)).

OPERATIONAL FLEXIBILITY:

As long as the vapor pressures of the liquids stored in the various storage tanks do not trigger new or existing source applicable requirements, the source is free to clean barges of almost any type. However, the Permit Review Branch is of the opinion that non-CTG RACT applies to the barge cleaning operation. The permit therefore contains requirements that this operation be controlled.